

CLAIMS

1. A method for transmitting an STM-256/OC-768 data signal having a high byte rate, the method comprising the steps of:
 - dividing the data signal byte by byte into four concatenated
 - 5 subsignals by removing unused bytes of overhead and frame alignment bytes;
 - forming modified STM-64/OC-192 pulse frames, which have a reduced number of frame alignment bytes;
 - inserting the subsignals into the modified pulse frames;
 - inserting a corresponding number of bytes of, in each case, one of
 - 10 the subsignals into each modified pulse frame instead of the frame alignment bytes no longer transmitted;
 - inserting remaining bytes of the respective subsignal into unused time slots of an overhead and a payload of the modified pulse frame;
 - transmitting the subsignals; and
 - 15 combining the subsignals again at a receiving end to form an STM-256/OC-768 data signal at the receiving end.
2. A method for transmitting an STM-256/OC-768 data signal as claimed in Claim 1, wherein, in the overhead of the modified pulse frame, a
 - 20 maximum of 384 bytes are not available for transmitting data of one of the subsignals.
3. A method for transmitting an STM-256/OC-768 data signal as claimed in Claim 1, wherein, apart from the frame alignment bytes, the modified
 - 25 pulse frames contain a further eight overhead bytes.
4. A method for transmitting an STM-256/OC-768 data signal as claimed in Claim 1, the method further comprising the steps of:
 - removing all unused 1536 bytes of the data of the data signal;
 - 30 reducing the number of frame alignment bytes of the modified pulse frames by at least eight bytes; and

transmitting the data of one subsignal, instead of the at least eight bytes, beginning with the 1537th byte of the data signal.

5. A method for transmitting an STM-256/OC-768 data signal as
5 claimed in Claim 1, wherein the modified pulse frames are provided with numbering.

6. A method for transmitting an STM-256/OC-768 data signal as
claimed in Claim 5, wherein a superframe is formed with an integral multiple of
10 four modified pulse frames.

7. A method for transmitting an STM-256/OC-768 data signal as
claimed in Claim 5, wherein the numbering is transmitted in a C byte of each
modified pulse frame.

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8. A method for transmitting an STM-256/OC-768 data signal as
claimed in Claim 5, wherein a marking of a beginning of the superframe is
transmitted in a C byte of each modified pulse frame.

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